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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,256	01/20/2006	Masato Onaya	08228/076001	7195

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EXAMINER

YAARY, MICHAEL D

ART UNIT	PAPER NUMBER
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2193

NOTIFICATION DATE	DELIVERY MODE
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09/16/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/533,256	Applicant(s) ONAYA ET AL.	
	Examiner MICHAEL YAARY	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/30/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-7 are pending in the application.

Specification

2. The abstract of the disclosure is objected to because the length exceeds the limits of 50-150 words. Correction is required. See MPEP § 608.01(b).
3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
 - (i) Claims 1 is directed to an apparatus that merely perform calculations and manipulation of data. In order for such a claimed invention to be statutory, the claimed invention must accomplish a practical application. That is the claimed invention must transform an article or physical object to a different state or thing, or produce a useful,

Art Unit: 2193

concrete, and, and tangible result; see State Street 47, USPQ2d. It is clear from independent claim 1 that the claimed invention merely involves calculations and manipulations of data; that is generating a random number sequence. The result produced by the invention, as recited in the claims, does not have a real world value but merely a number without a practical application that makes the result useful, concrete, and tangible. Therefore, independent claim 1 is directed to non-statutory subject matter as the claimed invention fails to accomplish a practical application.

(ii) Claims 2-7 are rejected for similar reasons as discussed for their respective parent claim, as they fail to present any limitations that resolve the deficiencies of the claims from which they depend.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Williams (US Pub. 2003/0236803).

Art Unit: 2193

8. **As to claim 1**, Williams discloses a random number generation device (abstract) comprising:

pseudo random number generating means capable of outputting random number patterns of a plurality of pseudo random number sequences ([0016], lines 1-6 and pseudo random number generator 35 of figure 3);

Physical random number generating means for generating physical random numbers ([0016], lines 1-6 and analog random number generator 25 of figure 3); and

Switching means for switching pseudo random number sequences of random numbers that are output by said pseudo random number generating means on the basis of physical random numbers generated by said physical random number generating means ([0037], lines 1-14).

9. **As to claim 2**, Williams discloses said pseudo random number generating means having linear shift-register code generator ([0035], lines 6-8);

Said switching means for switching between inverted and non-inverted feedback input values to said linear shift-register code generator on the basis of a physical random number generated by said physical random generating means [0016]; and [0037]).

10. **As to claim 3**, Williams discloses said pseudo random number generating means having linear shift-register code generator ([0035], lines 6-8);

Art Unit: 2193

Said switching means for switching between inverted and non-inverted output values from said linear shift-register code generator on the basis of a physical random number generated by said physical random generating means [0016]; and [0037]).

11. **As to claim 4**, Williams discloses said pseudo random number generating means having a linear shift-register code generator and generating a plurality of feedback input values on the basis of different combinations of taps of the linear shift-register code generator (LFSR of figure 1 and 1A and [0005]);

Said switching means for switching, from among said plurality of feedback input values that are generated, the feedback input values to be fed back as input to the linear shift-register code generator on the basis of a physical random number generated by said physical random number generating means (LFSR of figure 1 and 1A; [0005]; [0016]; and [0037]).

12. **As to claim 5**, the claim is rejected for similar reasons as claim 4 above.

13. **As to claims 6 and 7**, Williams discloses detecting means for detecting a code sequence of said linear shift-register code generator; wherein if random number of a valid pseudo random number sequence cannot be generated due to said code sequence that was detected, said switching means switch to a pseudo random number sequence other than said pseudo random number sequence ([0039]-[0041]).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Pat. 5,297,207 - Machine generation of cryptographic keys by non-linear process

US Pat. 6,253,223 - Robust random number generator

US Pat. 6,324,558 – Random number generator

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL YAARY whose telephone number is (571)270-1249. The examiner can normally be reached on Monday-Friday, 8:00 a.m - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock can be reached on (571) 272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2193

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. Y./

Examiner, Art Unit 2193

/Lewis A. Bullock, Jr./

Supervisory Patent Examiner, Art Unit 2193